

they are meant chiefly for the purpose of making men who are for the most part miners acquainted with the ores they meet with in carrying on their occupation. The teachers go at different periods, and give a course of lectures, and show by demonstration the method of testing the various ores and what metals they contain. By this means the miners become acquainted with the process, and are in a better position to prospect and develop the mines.

22. *Mr. M. J. S. Mackenzie.*] Might not the same results be shown equally well by an ordinary assay, or suppose by a descriptive letter in a newspaper?—As a rule miners look on newspapers with suspicion as not always to be relied on.

23. *Mr. O'Connor.*] Miners are prejudiced in such matters against newspaper information; but supposing experts were sent round the goldfields?

*The Chairman:* That is what is done now.

*Mr. O'Connor:* That is to say, the miners could be got together, and they could get all this information relating to their pursuits. The whole purpose, as I understand, is to give them not only the best information, but the knowledge that will enable them to demonstrate the existence of the precious or other metals in particular ore.

24. *Mr. Valentine.*] Do you not give them practical demonstration in the school which will enable them to eliminate the gold or silver that may be in the ores?—The miners are made to test the ores themselves after the teacher has shown them the method; but it was never intended or expected from the present schools on the goldfields to produce scientific experts in metallurgy and all its branches.

25. *Mr. Allen.*] How long, I want to know, does that course of demonstration last?—It depends on the locality. In a large place like Reefton, for instance, it might be a considerable time; in some small places it might be not over a month.

26. Do you mean that you can tell them in that period how to deal with ores and to apply the methods for the extraction of gold?—Miners are a very intelligent class of men. Once give them an inkling of anything they do not know, or show them where they are wrong, it causes their attention to be drawn to the matter at once. I do not say that you will teach them to deal with ores or to apply the methods of gold-extraction within a month; but you will cause them to read up the subject, to prepare their minds for the practical treatment of it in any way that is available to them.

27. Is it the object of these schools to teach each miner the way to extract the ores; or is it the object to teach managers to become metallurgical or mineralogical mining experts?—You cannot set up such a difference between the mine-manager and the miner. The miner, although he is a miner to-day, may be a mine-manager to-morrow. The schools were established with the intention of being able to get a better class of men to manage and take charge of mines, they also give every one an opportunity of qualifying themselves to become mine-managers; but the great object is to make every one following mining pursuits to become familiar with the classes of ore that are met with.

28. Is it to teach each individual miner to become expert, or is it to teach particular individuals; your idea appears to be that it is to teach each miner to become expert?—I do not mean "experts;" a man cannot be regarded as an expert unless he has gone through a regular system of metallurgical training. These schools of mines were intended simply to give any one who liked to attend them the opportunity of testing the various ores he was likely to come in contact with and to be able to distinguish them.

29. *The Chairman.*] Is it the case that the majority of persons attending these schools are miners?—Yes; miners generally.

30. *Mr. Valentine:* You would say that a person coming from attendance upon a course of these lectures would be better able to take the position of a manager than he would otherwise have been?—Decidedly.

31. *The Chairman.*] Can you give any information as to the number of persons, that is, miners, who have attended these schools?—I could not exactly tell the number; I should have to refer for it to Dr. Black's report.

32. *Mr. Valentine.*] Do you not keep a record of attendance?—No.

33. *Mr. Allen.*] Is there the remotest prospect of this teaching making the extraction of gold or silver payable where it was not payable before?—I think there is no doubt of it.

34. You think there is a prospect?—Yes.

35. *Mr. Cadman.*] I think there is no doubt of it; you say so?—Yes.

36. *Mr. Allen.*] What makes you think so?—Throughout the North Island some of the ores are very refractory, and this subject is causing considerable attention owing to so many being able to make assays; that the result, I think, will be that you will be able to make poorer mines pay, as the by-products will be utilised.

37. Have you had any experience of the establishment of schools of mines in the other colonies?—Yes; I am acquainted with the method of working the schools of mines at Ballarat and Sandhurst. The only school at one time was that at the Melbourne University; but the class of people they wanted to attend there could not be got. The first school of mines upon a goldfield was at Ballarat, which is a very large goldfield centre. After that there was a school established at Sandhurst for technical instruction.

38. Do you know that Ballarat is anxious to reassociate itself with Melbourne University?—Yes.

39. Do you know anything of the schools of mining in England?—No.

40. Or in America?—No; only from reading about them.

41. *Mr. Valentine.*] In the other colonies do they go to the outlying districts to teach?—In New South Wales they do, but not in Victoria.

42. *Mr. Guinness.*] What number of lecturers or professors have you engaged?—There are six altogether.